Ontario

Ministry of Health and Long-Term Care
Public Health Division

Ontario Influenza Bulletin
2005-2006 Season

SURVEILLANCE WEEK 50 (December 11 to 17, 2005)

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from December 11 to 17, 2005. The analysis for this issue occurred on Thursday December 22nd, therefore all data is current to that date.

During week 50, influenza activity remained low in Ontario. Two sporadic cases of Influenza A were reported from two different regions through iPHIS, but no institutional outbreaks, attributed to influenza, were reported.

For a definition of influenza-like illness (ILI) activity levels and a map of Ontario illustrating health unit locations and health regions, please refer to the Appendix. If you would like to provide feedback, please contact Shafiq Chowdhury (shafiq.chowdhury@moh.gov.on.ca, 416-327-7807) or Anne-Luise Winter (anne-luise.winter@moh.gov.on.ca, 416-327-7301).

Please note that due to the upcoming holiday season the publication of the Ontario Influenza Bulletin for week 51 (reporting period December 18 to 24) will be postponed until the subsequent week. We apologize for any inconvenience this may cause.

Table 1: Summary of laboratory-confirmed influenza cases (sporadic) and institutional outbreaks, by health region, December 11 to 17, 2005

	HEALTH REGION							TOTAL
	North West	North East	Eastern	Central East	Toronto	South West	Central West	
Lab-confirmed Influenza cases*								
Influenza A	0	0	0	1	1	0	0	2
Influenza B	0	0	0	0	0	0	0	0
Unspecified †	0	0	0	0	0	0	0	0
Total new cases	0	0	0	1	1	0	0	2
Institutional influenza outbreaks‡	0	0	0	0	0	0	0	0

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD, Provincial Appendix D and Appendix E Database]
* Includes reports of sporadically occurring influenza through iPHIS, as well as cases in institutional outbreaks, with dates of onset in the surveillance period.
† Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as "Unspecified").
‡ Laboratory-confirmed outbreaks in institutions during the surveillance period.

Table 2: Confirmed* reports of influenza by health unit & health region, with an episode date† between December 11 to 17, 2005

Region	Health Unit	Laboratory-Confirmed Influenza			
		Influenza A	Influenza B	Unspecified‡	TOTAL
North West	Northwestern	0	0	0	0
	Thunder Bay District	0	0	0	0
	TOTAL NORTH WEST	0	0	0	
North East	Algoma	0	0	0	0
	North Bay Parry Sound District	0	0	0	0
	Porcupine	0	0	0	0
	Sudbury & District	0	0	0	0
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	0	0	0	0
Eastern	Eastern Ontario	0	0	0	0
	Hastings & Prince Edward Counties	0	0	0	0
	Kingston, Frontenac, Lennox & Addington	0	0	0	0
	Leeds, Grenville & Lanark	0	0	0	0
	Ottawa	0	0	0	0
	Renfrew	0	0	0	0
	TOTAL EASTERN	0	0	0	0
Central East	Durham Region	0	0	0	0
	Haliburton, Kawartha, Pine Ridge District	0	0	0	0
	Peterborough County-City	0	0	0	0
	Simcoe Muskoka District	1	0	0	1
	York Region	0	0	0	0
	Peel Region	0	0	0	0
	TOTAL CENTRAL EAST	1	0	0	1
Toronto	Toronto	1	0	0	1
	TOTAL TORONTO	1	0	0	1
South West	Grey-Bruce	0	0	0	0
	Elgin-St. Thomas	0	0	0	0
	Huron County	0	0	0	0
	Chatham-Kent	0	0	0	0
	Lambton	0	0	0	0
	Middlesex-London	0	0	0	0
	Oxford	0	0	0	0
	Perth District	0	0	0	0
	Windsor-Essex County	0	0	0	0
	TOTAL SOUTHWEST	0	0	0	0
Central West	Brant	0	0	0	0
	Haldimand-Norfolk	0	0	0	0
	Hamilton	0	0	0	0
	Niagara Region	0	0	0	0
	Halton Region	0	0	0	0
	Waterloo Region	0	0	0	0
	Wellington-Dufferin-Guelph	0	0	0	0
	TOTAL CENTRAL WEST	0	0	0	0
	TOTAL ONTARIO	***2***	***0***	***0***	***2***

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD]
* Confirmed cases of influenza can include laboratory-confirmed cases and epi-linked cases
† The episode date corresponds to symptom onset date
‡ Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as unspecified)

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Table 3: Cumulative* confirmed† cases of influenza by health unit & health region, September 1, 2005 to December 17, 2005

Region	Health Unit	Laboratory-Confirmed Influenza			
		Influenza A	Influenza B	Unspecified‡	TOTAL
North West	Northwestern	0	0	0	0
	Thunder Bay District	0	0	0	0
	TOTAL NORTH WEST	0	0	0	0
North East	Algoma	0	0	0	0
	North Bay Parry Sound District	0	0	0	0
	Porcupine	0	0	0	0
	Sudbury & District	0	0	0	0
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	0	0	0	0
Eastern	Eastern Ontario	0	0	0	0
	Hastings & Prince Edward Counties	0	0	0	0
	Kingston, Frontenac, Lennox & Addington	0	0	0	0
	Leeds, Grenville & Lanark	0	0	0	0
	Ottawa	1	0	0	1
	Renfrew	0	0	0	0
	TOTAL EASTERN	1	0	0	1
Central East	Durham Region	0	0	0	0
	Haliburton, Kawartha, Pine Ridge District	1	0	0	1
	Peterborough County-City	0	0	0	0
	Simcoe Muskoka District	1	0	0	1
	York Region	0	1	0	1
	Peel Region	0	0	0	0
	TOTAL CENTRAL EAST	2	1	0	3
Toronto	Toronto	2	0	0	2
	TOTAL TORONTO	2	0	0	2
South West	Grey-Bruce	0	0	0	0
	Elgin-St. Thomas	0	0	0	0
	Huron County	2	0	0	1
	Chatham-Kent	0	0	0	0
	Lambton	0	0	0	0
	Middlesex-London	0	1	0	1
	Oxford	0	0	0	0
	Perth District	0	0	0	0
	Windsor-Essex County	0	0	0	0
	TOTAL SOUTHWEST	2	1	0	3
Central West	Brant	0	0	0	0
	Haldimand-Norfolk	0	0	0	0
	Hamilton	0	0	0	0
	Niagara Region	0	0	0	0
	Halton Region	0	0	0	0
	Waterloo Region	1	0	0	1
	Wellington-Dufferin-Guelph	0	0	0	0
	TOTAL CENTRAL WEST	1	0	0	1
	TOTAL ONTARIO	***8***	***2***	***0***	***10***

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD]

* Cumulative case counts include late reports and records that are otherwise reconciled. Therefore, cumulative counts may not equal new cases plus previous cumulative value.

† Confirmed cases of influenza can include laboratory-confirmed cases and epi-linked cases.

‡ Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as unspecified)

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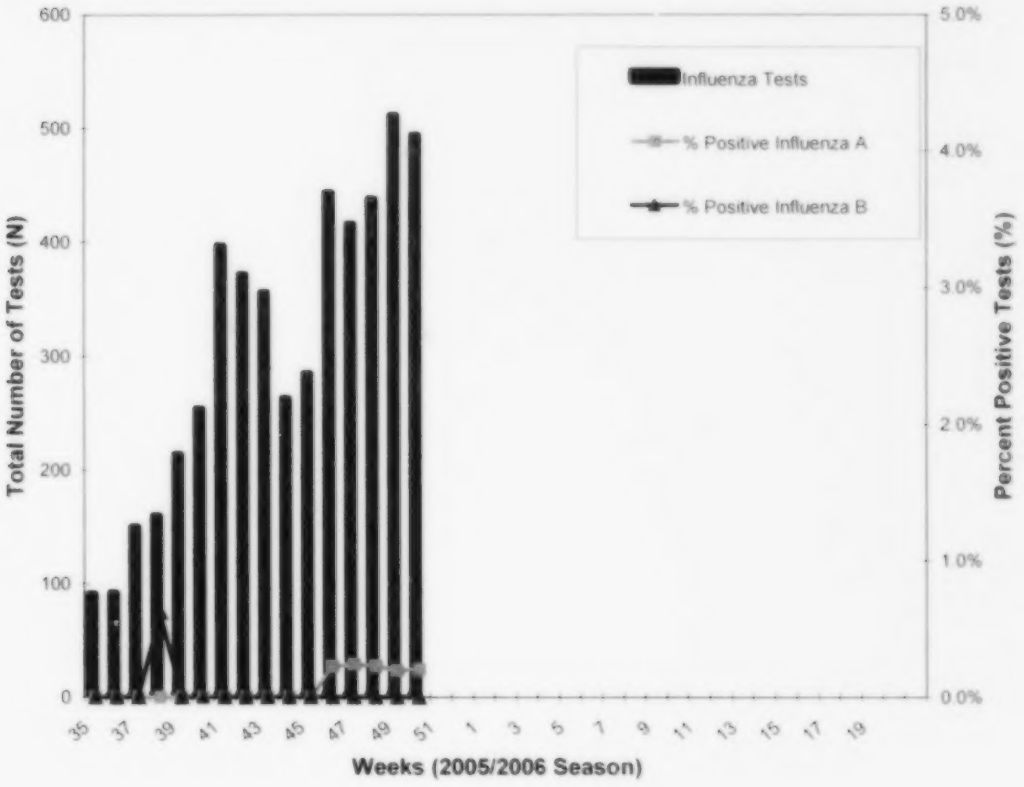
Influenza Subtype(s):

Between December 4th and December 10th (week 49), the National Microbiology Laboratory conducted 1,651 laboratory tests for influenza, with 8 positive results for influenza A and 23 positive results for influenza B reported. Among these, 511 (31%) isolates were from Ontario, with one influenza A case detected.

Since the start of the 2005-2006 influenza season, the National Microbiology Laboratory (NML) has antigenically characterized 17 influenza viruses; 10 A/California/07/04-like viruses (3 in Ontario, 3 in Saskatchewan and 4 in British Columbia), 4 B/Hong Kong/330/01-like viruses (3 in Alberta & 1 in British Columbia) belonging to the B/Victoria/2/87 lineage, and 3 B/Shanghai/361/02-like viruses (Ontario, Alberta & British Columbia) belonging to the B/Yamagata/16/88 lineage. The 2005-2006 season Canadian vaccine contains an A/New Caledonia/20/99 (H1N1)-like, an A/California/7/04 (H3N2)-like, and a B/Shanghai/361/02-like virus strain.

As this is obtained from FluWatch (Public Health Agency of Canada), data presented is inclusive to December 10, 2005.

Figure 1: Total number of influenza tests performed & percent of positive tests in Ontario reported to the Centre for Infectious Disease Prevention and Control (CIDPC), by report week*.



Source: Public Health Agency of Canada

* Total numbers reported include late reports; therefore totals may not be equal to the sum of the weekly numbers.

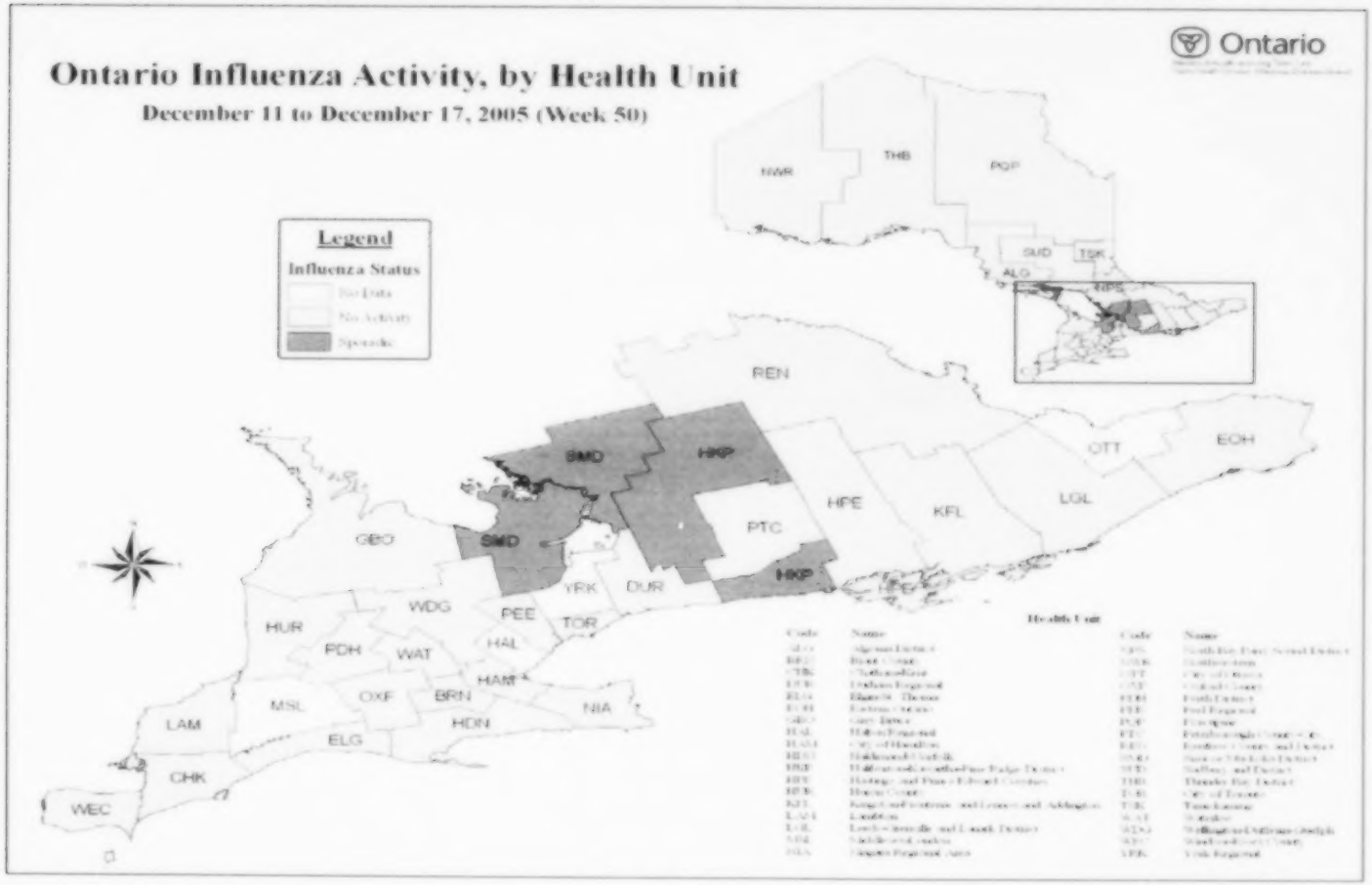
Note: Cumulative numbers for season to date are available through FluWatch:
http://www.phac-aspc.gc.ca/fluwatch/

Table 4: Institutional respiratory outbreaks in Ontario, September 1 to December 17, 2005

Institutional Respiratory Infection Outbreaks		
New Outbreaks*	**N**	**% (of outbreaks)**
Influenza A	0	0
Influenza B	0	0
Influenza A and B	0	0
Parainfluenza (All types)	0	0
Other organisms	0	0
No organism identified	4	100
TOTAL	***4***	***100***
Total Respiratory Infection Outbreaks, Season to Date**	**N**	**% (of outbreaks)**
Influenza A	0	0
Influenza B	0	0
Influenza A and B	0	0
Parainfluenza (All types)	14	7.7
Other organisms	43	23.6
No organism identified	125	68.7
TOTAL	***182***	***100***
Types of Institutions (All Outbreaks)	**N**	**% (of outbreaks)**
Long-Term Care Homes	156	85.7
Hospitals	8	4.4
Retirement Homes	17	9.3
Other	1	0.6
TOTAL	***182***	***100***
Outbreak Related Complications (All Outbreaks)	**N**	**% (of cases)**
Deaths		
Residents	66	3.0
Staff	0	0.0
Pneumonia (Chest x-ray confirmed)		
Residents	115	5.2
Staff	8	1.2
Hospitalizations		
Residents	142	6.4
Staff	2	0.3

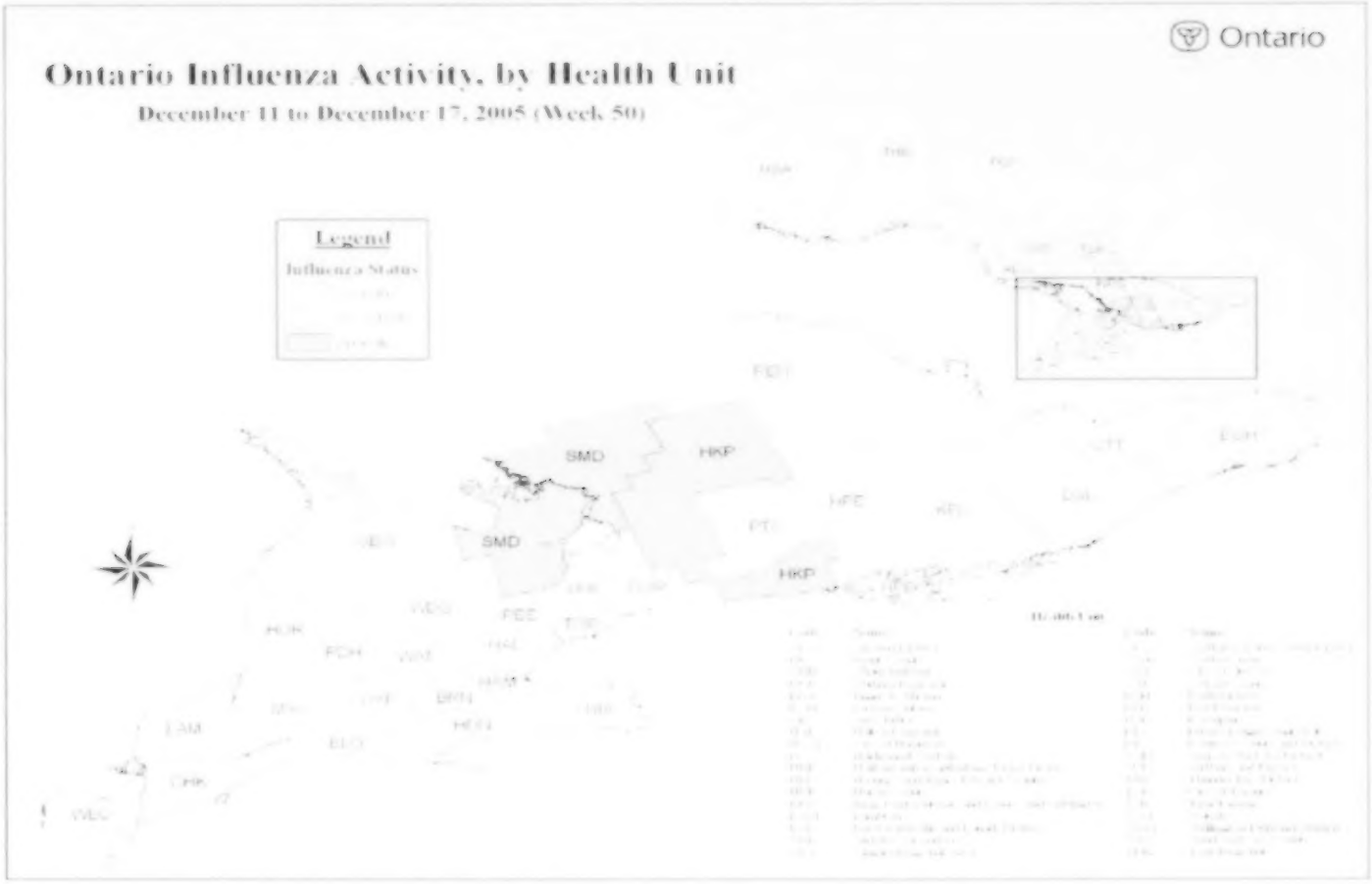
SOURCE: MOHLTC [Provincial Appendix D and Appendix E Database]
** **Season to date** includes all outbreaks in which the date of onset of the first case occurred between September 1, 2005 and December 17, 2005.
* **New outbreaks** are those in which the date of onset of the first case occurred in the surveillance period December 11 to 17, 2005 (Week 50)

Figure 2: Influenza activity* in Ontario by health unit, December 11 to 17, 2005 (Week 50).



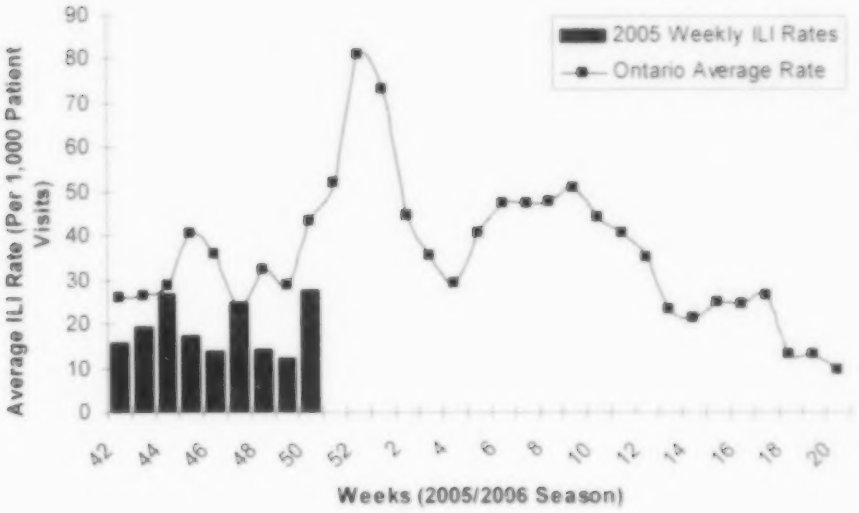
SOURCE: MOHLTC [Provincial Influenza Activity Report (Appendix C) Database]* Influenza activity levels, as represented on this map, are assigned by local public health units and reported to the MOHLTC by the Tuesday following the end of the surveillance week at 4 pm. Activity levels are assigned based on laboratory confirmations, ILI reports from various sources, and laboratory-confirmed institutional outbreaks. Please refer to detailed definitions for the 2005-2006 season included in the Appendix.

Figure 2: Influenza activity* in Ontario by health unit, December 11 to 17, 2005 (Week 50).



SOURCE: MOHLTC [Provincial Influenza Activity Report (Appendix C) Database]* Influenza activity levels, as represented on this map, are assigned by local public health units and reported to the MOHLTC by the Tuesday following the end of the surveillance week at 4 pm. Activity levels are assigned based on laboratory confirmations, ILI reports from various sources, and laboratory-confirmed institutional outbreaks. Please refer to detailed definitions for the 2005-2006 season included in the Appendix.

Figure 3: Average influenza-like illness rate (per 1,000 patient visits) reported by sentinel physicians* in Ontario, by report week, compared to Ontario average† (1996/96 to 2004/05 seasons).



Source: Public Health Agency of Canada
* Sentinel physician information is reported to Public Health Agency of Canada
†No data available for mean rate in previous years for weeks 21 to 39 (1996-1997 through 2002-2003 seasons). During weeks 20-39, 2002-2003/2004-2005 seasons, ILI is reported once every two weeks, on even weeks only.

Table 5: Average Influenza-like illness rate (per 1,000 patient visits) reported by sentinel physicians* in Ontario, by age group and postal code.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K0C1A0	0	0	0	0	0
K2P1V3	0	0	1	0	0
K0H2N0	0	1	4	0	0
K7H2W6	0	0	0	0	0
K7L1E9	0	0	0	0	0
K0L1C0	0	0	0	0	0
L1A3W4	0	0	0	0	0
K0L1H0	0	1	1	0	0
K0M1A0	0	0	0	0	0
L1B1H8	0	0	0	0	0
L4J7Y3	0	0	0	0	0
M1K2S3	0	0	0	0	0
M5M1B2	0	0	0	0	0
M4X1W4	0	0	0	0	0
M6G4A1	0	1	0	0	0
M4E1V8	0	0	0	0	0
M8Y1W3	0	0	0	0	0
M2N6H7	0	0	0	0	0
M2J2Z1	0	0	0	0	0
M3H1T1	0	0	1	0	0
M9W6N5	0	0	0	0	0
M8V2Z5	0	0	0	0	0
L5J2W4	0	0	3	0	0
L5G3H5	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L6V4H6	0	0	0	0	0
L9W1G2	0	0	1	0	0
N1H4G2	0	0	0	0	0
L7R1M6	0	0	0	0	0
L9H1V1	0	0	1	0	0
L9H2G2	0	0	0	1	0
L0R1H0	0	0	0	0	0
L2E1Y3	0	0	0	0	0
L0R1B0	1	0	0	1	0
N3C2E2	0	0	1	0	0
N2G1P2	0	0	0	0	0
N2M3B5	0	0	2	0	0
N0R1G0	0	0	0	0	0
N8X2G3	0	2	6	0	0
N0M1T0	0	0	0	0	0
N6C2R5	0	0	0	0	0
N0G1L0	0	0	0	0	0
N0C1E0	0	0	0	0	0
L0M1S0	2	2	3	0	0
K0J1B0	0	0	0	0	0
P0H2H0	0	0	0	0	0
P0A1C0	0	0	0	0	0
P3E5V5	0	0	0	0	0
P4N1C6	0	0	0	0	0
P7E1H5	0	0	0	1	0
P0W1E0	0	0	0	0	0
P8N2Z6	2	0	0	0	0
ILI Sum	5	7	24	3	0
ILI Rate (per 1,000 patient visits)	54.35	63.64	29.48	7.48	0.00

Source: Public Health Agency of Canada
* Sentinel physician information is reported to the Public Health Agency of Canada
Note: The small numbers of sentinel physicians reporting at the local level make the ILI rates unstable. Please interpret these data correspondingly.

FURTHER INFORMATION

1. Ontario Ministry of Health and Long-Term Care
   Previous issues of the Ontario Influenza Bulleting can be accessed at:
   www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_04/flubul_mn.html

2. Public Health Agency of Canada
   Issues of FluWatch can be accessed at:
   www.phac-aspc.gc.ca/fluwatch/

3. United States Centers for Disease Control and Prevention
   www.cdc.gov/flu/

APPENDIX

Definitions for influenza activity levels:

No Data: No activity report corresponding to the surveillance week was received at the Ministry of Health and Long-Term Care Call Centre by the Tuesday (at 4 p.m.) following the end of the surveillance period.
No Activity = No ILI and no laboratory-confirmed cases* or outbreaks occurred.
Sporadic: sporadically occurring ILI **AND** laboratory-confirmed influenza* with NO outbreaks detected within the influenza surveillance region†
Localized: sporadically occurring ILI **AND** laboratory-confirmed influenza* together with outbreaks of ILI in schools and worksites or laboratory confirmed influenza in residential institutions occurring in less than 50% of the influenza surveillance region(s)
Widespread: sporadically occurring ILI **AND** laboratory-confirmed influenza* together with outbreaks of ILI in schools and worksites or laboratory-confirmed influenza in residential institutions occurring in greater than or equal to 50% of the influenza surveillance region(s)

* Confirmation of influenza within the surveillance region at any time within the prior four weeks
† Sub-regions within the province or territory as defined by the provincial/territorial epidemiologist

Influenza-Like Illness (ILI) Definitions:

A) ILI in the general population:

Acute onset of respiratory illness with fever and cough and with one or more of the following - sore throat, arthralgia, myalgia, or prostration which could be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

B) ILI/Influenza outbreaks:

Schools and work sites: greater than 10% absenteeism on any day most likely due to ILI
Residential institutions: two or more cases of ILI within a seven-day period, including at least one laboratory-confirmed case.